



# INDUSTRY PROFILES

Professional, Scientific and  
Technical Services Industry

2014

*Alberta* 

**Overview:**

The Professional, Scientific and Technical Services industry<sup>1</sup> in Alberta includes enterprises that make knowledge and skills available to other organizations or to the public, often on a project basis. For example, they may provide:

- legal services and accounting and related services;
- architectural, engineering and related services;
- surveying and mapping services;
- graphic, industrial or computer systems design services;
- management, scientific and technical consulting services, research and development services;
- advertising, public relations or market research services;
- translation services; and
- veterinary services.

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<sup>1</sup> North American Industry Classification System (NAICS) 2007 major group 54

## Section A: Business Environment

### 1. 2013 Employment and Unemployment Numbers and Rates

Table 1

	Alberta	Professional, Scientific and Technical Services Industry
Number of employed	2,211,000	177,600
Employment Share	N/A	8.0%
Number of unemployed	107,200	4,300
Unemployment rate	4.6%	2.4%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2014

Note: N/A denotes not-applicable. Employment share is obtained by dividing the number of employment in this industry by total employment in Alberta.

For more information on employment numbers or for a historical comparison, please go to the Labour Force Statistics<sup>2</sup> or Statistics Canada<sup>3</sup> websites.

### 2. Industry's Growth

- The Professional, Scientific and Technical Services industry accounted for 8.0% of total employment in Alberta in 2013.
- Employment in this industry is expected to grow at an average rate of 2.0% from 2013 to 2017.
- This industry is expected to account for 7.6% of total employment in Alberta in 2015.

For more information, see the *Alberta Modified Canadian Occupational Projection System (COPS) Outlook 2013 – 2017 Industry Employment Outlook*<sup>4</sup> online and the Alberta Learning Information Service (ALIS)<sup>5</sup> website for descriptions of industries.

<sup>2</sup> See <http://work.alberta.ca/labour/labour-force-statistics-and-annual-reviews.html>

<sup>3</sup> See <http://www.statcan.gc.ca>

<sup>4</sup> See <http://work.alberta.ca/documents/cops-alberta-industry-outlook-2013-2017.pdf>

<sup>5</sup> See <http://www.alis.alberta.ca>

### 3. Facts, Trends and Outlook

According to Statistics Canada's National Economic Accounts, the Professional, Scientific and Technical Services industry accounted for 5.6% of Alberta's Gross Domestic Product in 2012, up from 4.5% in 2001. This industry's share of Alberta's total employment was 7.6% in 2013, a slight increase from that in 2002.

Employment in 2013 was 12.5% higher than its level in 2012. Over the last 10 years, employment (the total number of employees and self-employed people) increased from 119,000 people in 2003 to 177,600 people in 2013. There were 109,100 employees in the industry in 2013 of whom 92.7% were full-time and 7.3% were part-time. Self-employed people accounted for 33.6% of total employment in the industry in 2012.

Table 2

Characteristic	Alberta	Professional, Scientific and Technical Services
Median Retirement Age (years)	62.7	66.8
Average Number of Hours Worked per Week	37.8	38.0
Multiple Jobholders (% of total employment)	5.4%	4.5%
Average Job Tenure (months)	88.1	78.8
Employees Under Union Coverage (%)	19.0%	2.6%
Employees Working Overtime per Week (%)	20.2%	17.4%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Tables 282-0022, 282-0031, 282-0042, 282-0078 and 282-0084, 2014, and custom tabulation (median retirement age)

Note: The percentage of multiple jobholders in Alberta is obtained by dividing the number of multiple jobholders in Alberta by total employment in Alberta. The percentage of multiple jobholders in the industry is obtained by dividing the number of multiple jobholders in the industry by total employment in the industry. This calculation method also applies to the percentage of employees under union coverage and the percentage of employees working overtime per week.

According to *Alberta Occupational Demand Outlook 2013-2023*<sup>6</sup>, employment growth in most occupations is expected to be below Alberta's average rate for all occupations of 2.3%.

<sup>6</sup> See <http://work.alberta.ca/labour/labour-market-forecasts.html>

#### 4. Size of Businesses in Alberta and the Industry

Table 3

Establishment Size	Businesses in Alberta		Businesses in Professional, Scientific and Technical Services	
	Number of Employees	%*	Number of Employees	%*
Less than 20 employees	654,800	35.5%	39,900	34.0%
20 to 99 employees	648,500	35.1%	35,600	30.4%
100 to 500 employees	352,600	19.1%	31,300	26.7%
Over 500 employees	189,500	10.3%	10,400	8.9%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0076, 2014

\* Percentages may not add up to 100 due to rounding.

Note: Statistics Canada's survey methodology for determining establishment size differs from the one it uses in the Labour Force Survey to determine total employment. As a result, the total number of employees by establishment size will not be the same as total employment in the industry, except by coincidence.



## Section B: Human Resources Profile

### 1. Occupational Information

Some examples of occupations in the Professional, Scientific and Technical Services industry include:

- accountant;
- architect;
- civil engineer;
- graphic designer; and
- lawyer.

For a complete listing of all occupations related to this industry as well as detailed information on education and skill requirements, visit the Alberta Occupational Profiles<sup>7</sup> website.

### 2. Demographics: Gender and Age

According to the Labour Force Survey, the gender breakdown in the Professional, Scientific and Technical Services industry in 2013 was as follows:

- women employed: 74,500 people, or 41.9%
- men employed: 103,100 people, or 58.1%

Overall in Alberta, women accounted for 45% and men made up 55% of total employment (for all industries).

Table 4

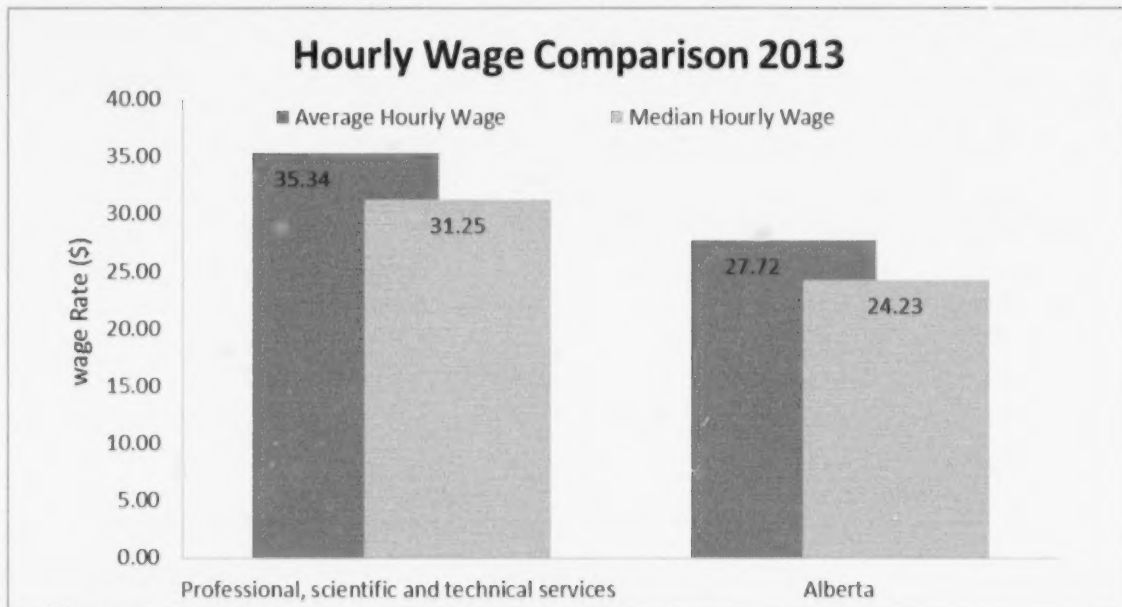
Age Characteristics	Employment in Alberta		Employment in Professional, Scientific and Technical Services	
	Number	%	Number	%
15-24 years	317,600	14.4%	15,500	8.7%
25-54 years	1,496,200	67.7%	125,900	70.9%
55 years and over	397,200	17.9%	36,200	20.4%

Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0008, 2014

<sup>7</sup> See <http://www.alis.alberta.ca/occinfo>

### 3. Wages

Chart 1



Data Source: Statistics Canada, Labour Force Survey, CANSIM Table 282-0072, 2014

Note: The average hourly wage is obtained by dividing the sum of the wages of all the employees by the total number of employees. The median hourly wage is that wage below which half the employees earn and above which half the employees earn.

### Wage and Salary Information for Selected Occupations

Table 5

Occupation	Average Hourly Wage			Average Annual Salary
	Starting Average	Overall Average	Top Average	
Lawyer and Quebec notary	\$ 32.93	\$ 57.38	\$ 90.70	\$ 118,511
Electrical engineer	\$ 30.51	\$ 39.04	\$ 52.44	\$ 78,575
Graphic designer	\$ 23.16	\$ 28.79	\$ 40.02	\$ 56,596
Veterinarian	\$ 38.99	\$ 49.30	\$ 58.67	\$ 100,342

Data Source: 2013 Alberta Wage and Salary Survey

For more information on the *2013 Alberta Wage and Salary Survey*, refer to the WAGEinfo<sup>8</sup> webpage. For job descriptions, duties, required skills and education for specific occupations in the Professional, Scientific and Technical Services industry, visit the ALIS<sup>9</sup> website.

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<sup>8</sup> See <http://www.alis.alberta.ca/wageinfo>

<sup>9</sup> See <http://www.alis.alberta.ca>



## Section C: Additional Information

### Links to Industry Associations

- Alberta Association of Architects  
(<http://www.aaa.ab.ca>)
- Alberta Innovates Technology Futures  
(<http://www.albertainnovates.ca>)
- Alberta Land Surveyors' Association  
(<http://www.alsa.ab.ca>)
- Association of Professional Engineers, and Geoscientists of Alberta  
(<http://www.apegga.org>)
- Certified General Accountants' Association of Alberta  
(<http://www.cga-alberta.org>)
- Chartered Accountants of Alberta  
(<http://www.albertacas.ca>)
- Economic Developers of Alberta  
(<http://www.edaalberta.ca>)
- Law Society of Alberta  
(<http://www.lawsocietyalberta.com>)

Call us or visit our website for more information or to find the following publications:

- 2013 Annual Alberta Labour Market Review
- Monthly Alberta Labour Force Statistics Highlights and Packages
- Alberta's Occupational Demand and Supply Outlook
- Alberta Labour Force Profiles
- Alberta Industry Profiles

[www.work.alberta.ca/labour.html](http://www.work.alberta.ca/labour.html) (see Labour Market Information)

In Edmonton: 780.422.4266

Long distance: 1.800.661.3753

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Published: April 2014.

ISBN 978-1-4601-1653-1

ISSN 2292-8987